



Williams Sound Corp.

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July 14, 1995

Federal Communications Commission
Washington D.C. 20554

Reply Comment
In the Matter of

WT Docket No. 95-~~96~~ 56

Amendment of the Commissions Rules RM-7784
Concerning Low Power Radio and
Automated Maritime Telecommunications
System Operations in the 216-217 MHz
Band

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In the above described "Notice of Proposed Rule Making", the Federal Communications Commission (FCC) has asked Williams Sound Corp. (WSC) for specific comment related to points contained therein. The following is our reply:

In the section of the above described FCC document titled "II. DISCUSSION", the final sentence asks for specific comment related to the proposed licensing scheme. WSC feels that the 20 channels nearest to TV channel 13 (216.0125 - 216.4375 MHz) specified as being limited to 100 mW should be available for the described applications (hearing assistance, AMTS, medical devices, etc. etc.) without a license, as should the remaining 10 frequencies (216.5125 - 216.7375 MHz) when used at or below 100 mW. Such low power devices present a very low risk of interference to other low power devices operating in the described applications. Also, setting aside 216.4625 MHz and 216.4875 MHz for use specifically for LETS would prevent interference to LETS from transmitters being used in these other applications. Based on our 19 years experience manufacturing and marketing low power hearing assistance transmitters and receivers, WSC feels that it is impractical to require licensing for such low power devices/applications. If this frequency band is strictly limited to low power users (1 Watt Maximum), licensing transmitters operating at or below 100 mW becomes unnecessary and interference to or from devices in the same

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frequency band becomes highly unlikely due to the "capture effect". For transmitters operating above 100 mW, WSC supports required licensing and the licensing parameters set forth in paragraph 9 of this section.

Also in this section are listed four questions, labeled a,b,c & d, to which comments have been requested. WSC comments as follows:

a) Instead of designating 30 channels for low power use, what are the advantages and disadvantages of permitting non-channelized emissions within the 216.0125 MHz - 216.7375 MHz band? What limitations are necessary in order to permit such operation?

Reply: This bandwidth is 725 KHz wide which dictates only 25 KHz separation between channels if there are to be 30 channels designated. With current technology, signal to noise ratio, frequency response, and overall fidelity may be compromised with only 25 KHz separation between channels. For purposes of auditory assistance, a high fidelity signal is important for intelligibility purposes. However, WSC agrees with the Commission that 30 channels be designated with 25 KHz separation to take advantage of using 15 channels at 50 KHz separation with a choice of multiple center frequencies. This will allow use of 15 channels with 50 KHz separation or 30 channels with 25 KHz separation and will allow manufacturers to take advantage of current technology. WSC supports the channel designation suggested in this notice of proposed rule making.

b) Should the proposed scope of eligibility and/or use of Low Power Radio Service be broadened or narrowed?

Reply: In the section titled III. CONCLUSION, the proposed applications for these frequencies are listed and include one-way auditory assistance, health care, and law enforcement tracking communications among others. This paragraph also states that "providing these channels for auditory assistance and health care devices would further the goals of the Americans with Disabilities Act, improve educational opportunities for persons with disabilities...." WSC has experienced a strong demand for improving educational opportunities for those Americans who do not speak or understand English as their primary language. The type of low power transmitters and receivers used for auditory assistance is also perfectly suited for use

as simultaneous language interpretation transmitters. WSC has seen a strong need for this type of service throughout America due to our customers recognizing these devices as suitable for this application. Current auditory assistance frequencies are not permitted to be used for this application under part 15. WSC proposes that, in addition to the above mentioned applications, simultaneous language interpretation be included as a permitted non-licensed application using transmission power of 100 mW or less. This would contribute greatly to the educational experience of many Americans and to foreign visitors.

Another application to which auditory assistance systems are suited for is for Audio Description for the Blind (ADB). In many cases, a narrative vocal description of stage presentations is requested by blind patrons attending plays, operas, or other performances. ADB can currently be accomplished through the use of FM auditory assistance systems (72-76 MHz), infrared systems, or magnetic loop systems. Infrared systems and magnetic loop systems have limitations as such as venue size limits, sound quality, operation in sunlight, portability, etc. Although there are circumstances where infrared or magnetic loop systems are viable or even preferred options, FM auditory assistance systems have fewer limitations, are very reliable, require limited installation, and generally cost less than these other options. WSC maintains that ADB is a form of auditory assistance. WSC asks the Commission to consider the inclusion of the "*....handicapped person*" terminology currently used under part 15 for the 72-76 MHz auditory assistance band.

c) What are the advantages and disadvantages of permitting eligibles in the AMTS service and eligibles in the new Low Power Radio Service (Part 95 channels only) to share each others' 216-217 MHz band channels on a secondary, non-interference basis?

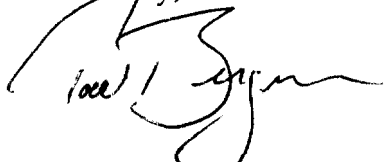
Reply: WSC feels that 3 additional 50 KHz channels (6 at 25 KHz) and one additional 200 KHz channel would be an advantage to the Low Power Radio Service. Also, if these additional low power frequencies being shared with AMTS are limited to 100 mW they pose no significant interference problems to AMTS. Concurrently, a one Watt signal used by AMTS will pose no significant interference problem to the Low Power Radio Service unless operating in close proximity to these lower power radiators. Due to this possibility, WSC asks the Commission to consider assigning "auditory assistance" preferred status.

d) Are the proposed technical requirements for Low Power Radio Service and AMTS operations (e.g. power and emission limitations) consistent with protecting adjacent TV Channel 13? Should any of the proposed technical requirements be revised, added, or removed?

Reply: Yes. These parameters are consistent with Channel 13 protection. Channel 13 is located at 210 - 216 MHz which is 12.5 KHz below the lowest proposed frequency for this new Low Power Radio Service. WSC believes that since these frequencies are a distance from TV Channel 13 and are being designated for low power use only (up to 1 Watt), they will not interfere with TV channel 13, or with other Low Power Radio Service users. WSC believes that keeping these frequencies designated as "low power" will be the key to successful operation for the services being considered under the Low Power Radio Service.

Thank you for the opportunity to comment on this important matter. WSC is glad to be considered as a resource and we invite you to call on us at any time.

Sincerely,

A handwritten signature in black ink, appearing to read 'Todd Bergum', with a stylized flourish extending to the right.

Todd Bergum
National Sales Manager
Williams Sound Corp.